

## **Supplementary Information Guide**

### ***In Vivo* Base Editing Rescues Hutchinson-Gilford Progeria Syndrome in Mice**

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**Supplementary Data and Videos** are provided as separate files.

**Supplementary Data 1.** AAV integration analysis from mouse whole-genome sequencing data

**Supplementary Data 2.** Analysis of SNVs from mouse whole-genome sequencing data

**Supplementary Data 3.** Liver cancer-associated SNVs and indels in mouse whole-genome sequencing data

**Supplementary Data 4.** CIRCLE-seq candidate off-target loci genomic coordinates and amplification primers

**Supplementary Data 5.** Raw data for *in vivo* samples

**Supplementary Data 6.** All SNVs from mouse whole-genome sequencing data

**Supplementary Video 1.** Representative untreated male progeria mouse (not enrolled in this study), taken at 7.5 months of age

**Supplementary Video 2.** Representative male progeria mice injected at P14 with ABE-AAV, taken at 9.75 months of age

**Supplementary Video 3.** Representative female progeria mice injected at P14 with ABE-AAV, and wild-type C57BL/6 female mouse, taken at 9.75 months of age

**Supplementary Video 4.** Representative male progeria mice injected at P14 with ABE-AAV, and wild-type C57BL/6 male mouse, taken at 11 months of age

**Supplementary Video 5.** Representative female progeria mice injected at P14 with ABE-AAV, taken at 11 months of age